



## **NORTH CAROLINA**

Department of Transportation



# The Future of Transportation

Secretary Jim Trogdon

October 2, 2017

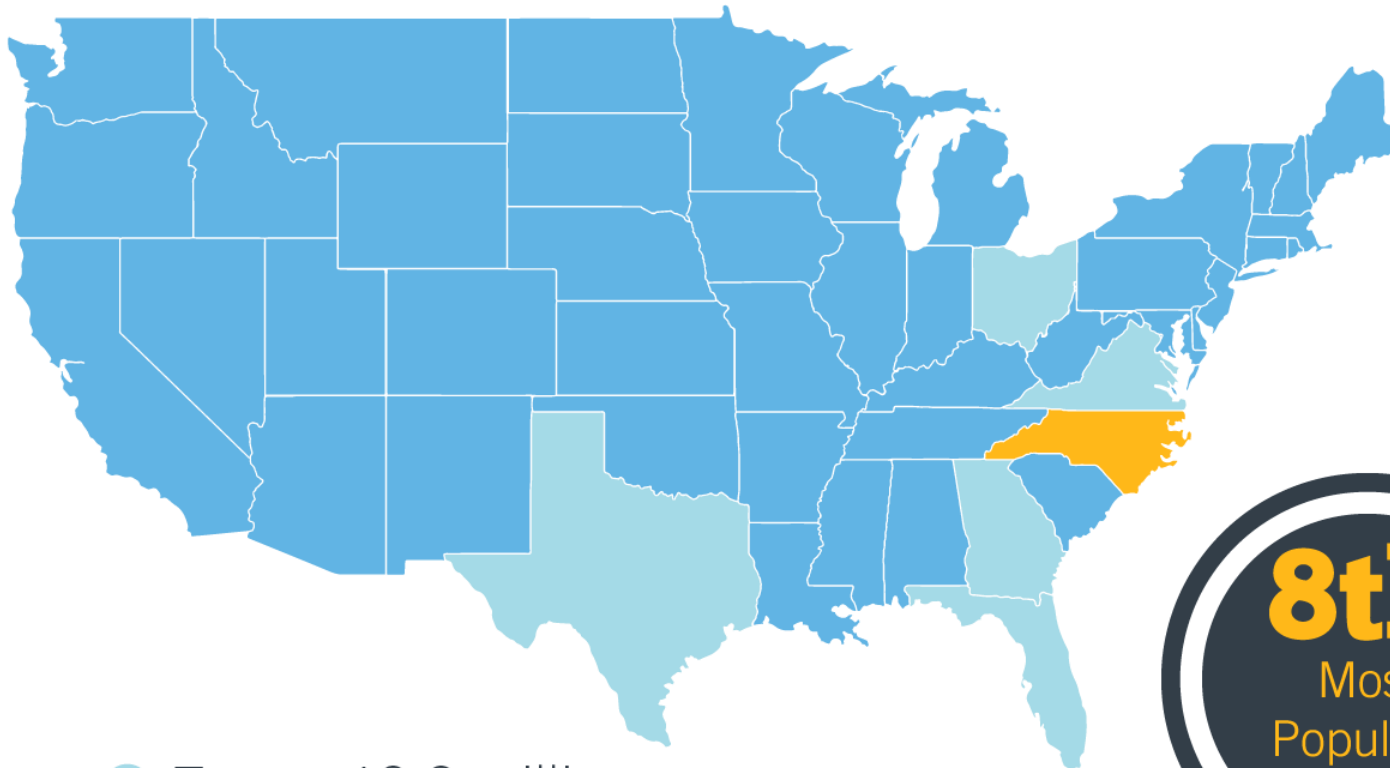


# The Future of Transportation

- ❑ Population changes will have a substantial impact on project planning and delivery
- ❑ Decrease in future year's revenue from motor fuels taxes
- ❑ Changes and challenges related to new technology



# Expected Population Growth by 2040



2040  
Population  
Ranking

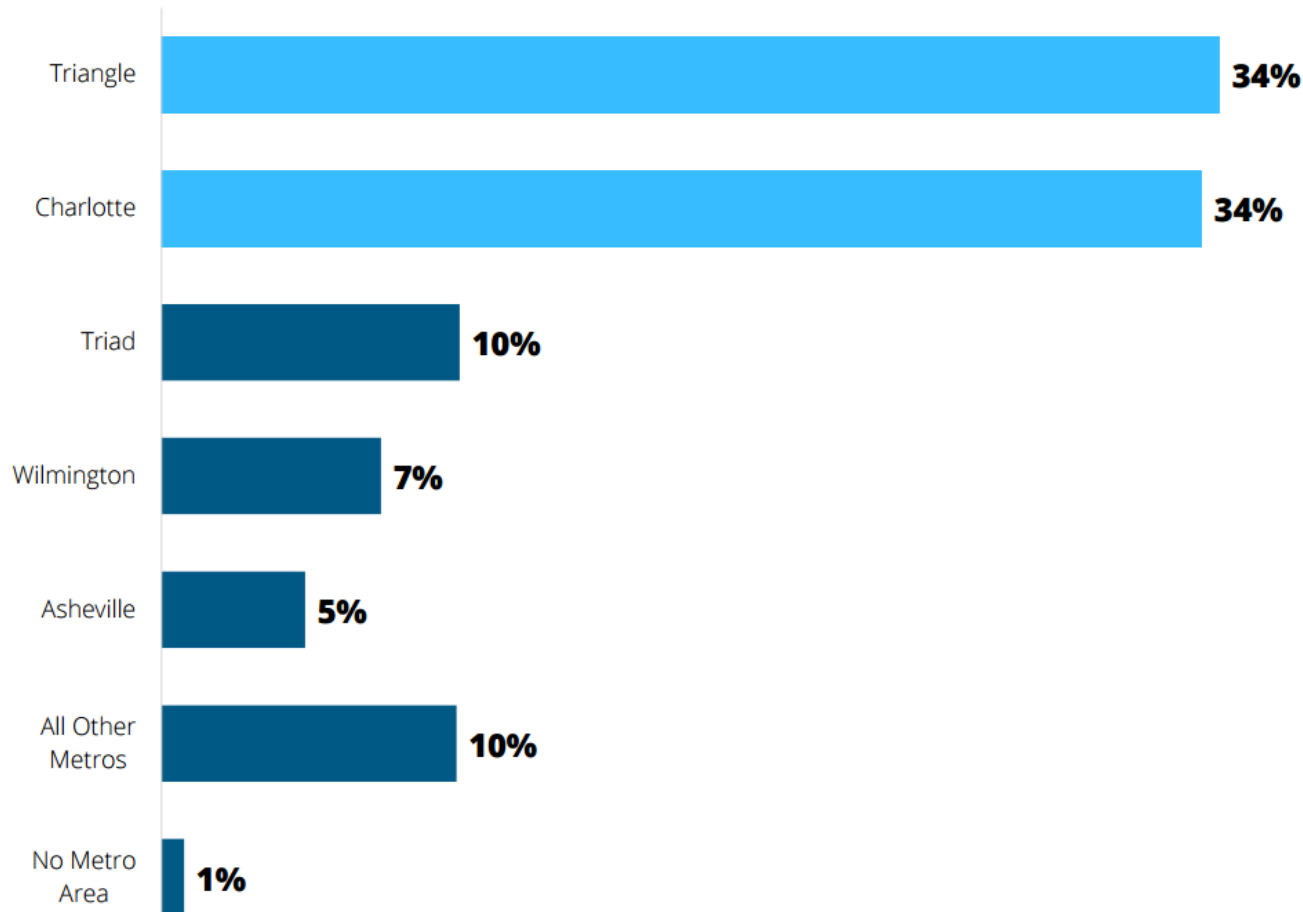
- 2 Texas: 40.6 million
- 3 Florida: 28.2 million
- 6 Georgia: 12.8 million
- 8 **North Carolina: 12.5 million**
- 9 Ohio: 11.7 million
- 10 Virginia: 10.2 million

**32%**  
increase  
from  
NC's 2010  
population

# NC Demographics

## Two-thirds of NC growth projected to occur in Triangle or Charlotte

*Projected share of 2010-2035 state population growth for select North Carolina metropolitan areas*



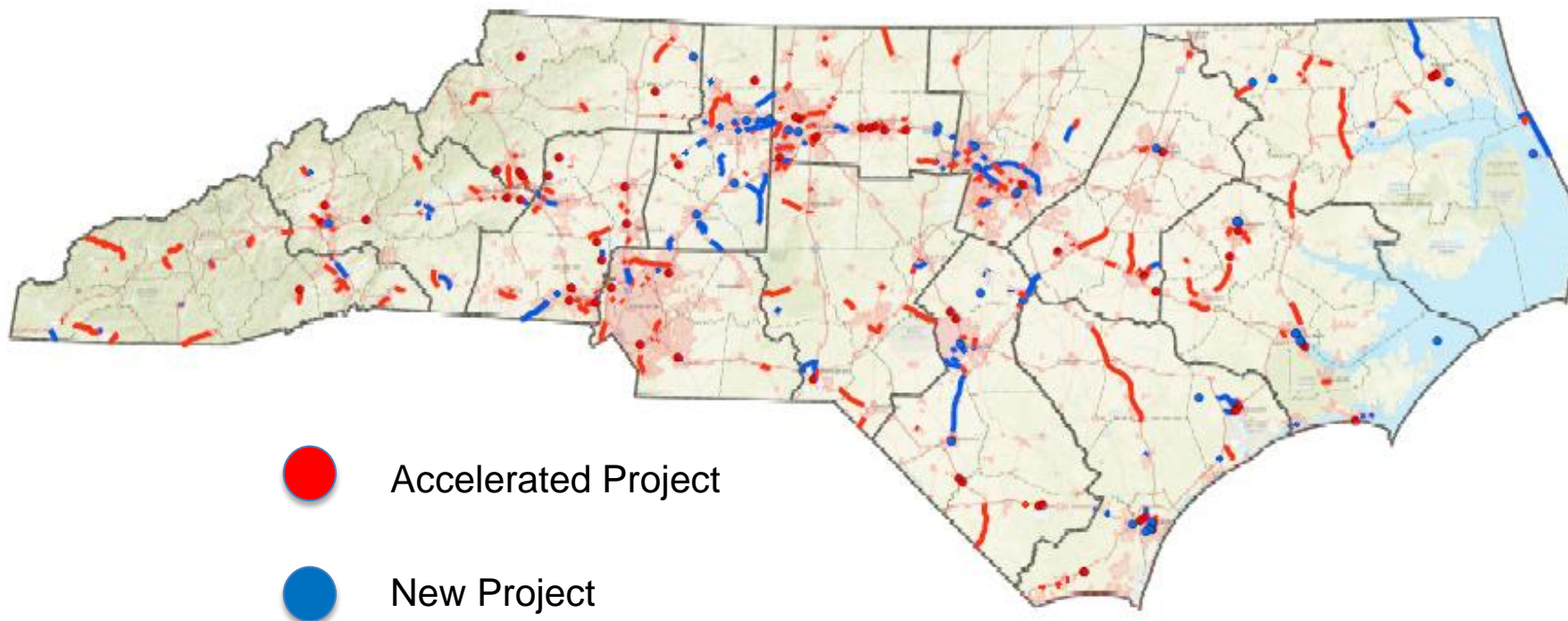
Data Source: NC OSBM

# What are we doing now?

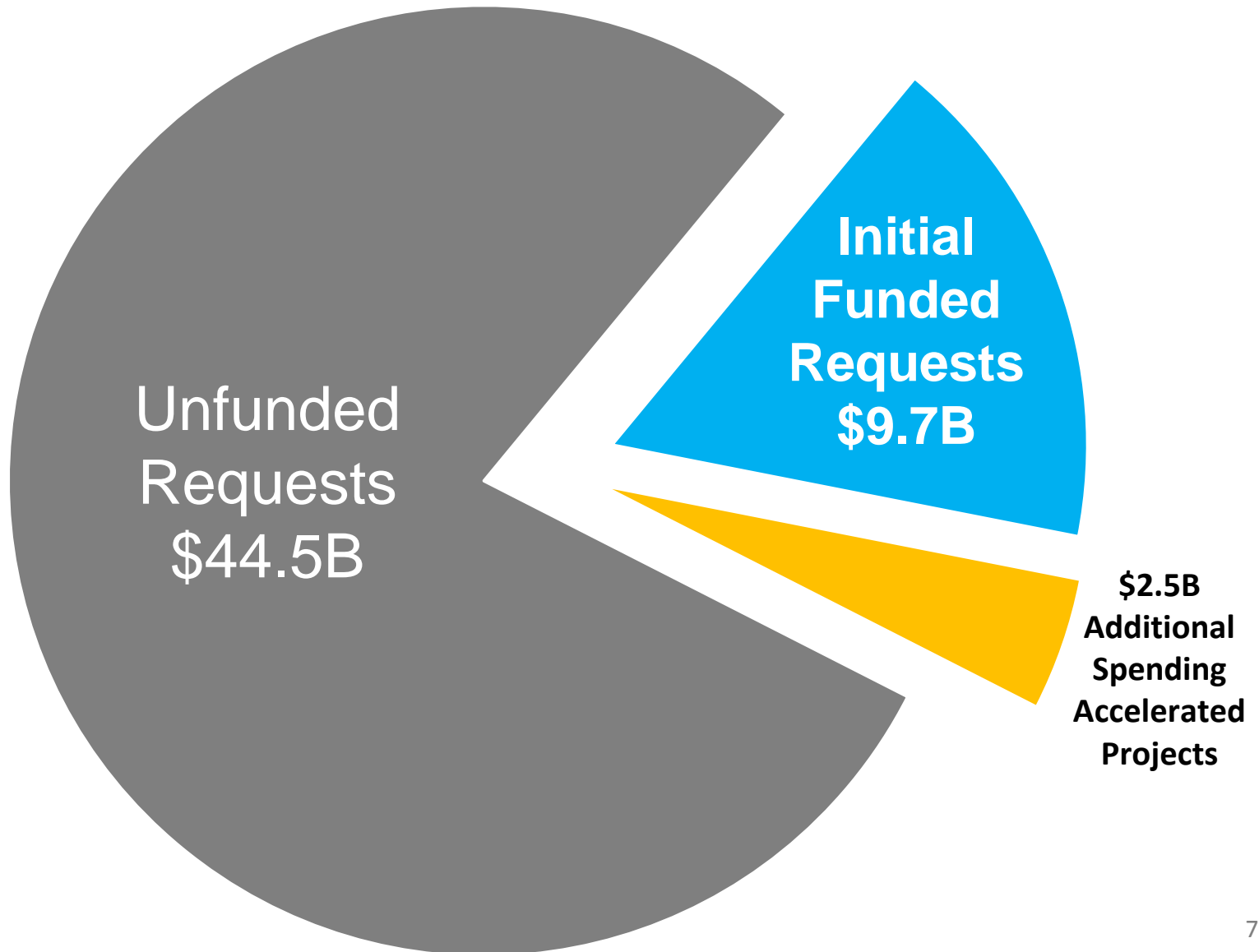
- ❑ Lack of program delivery has resulted in buildup of cash balance
  - ❑ Currently delivering 78% of TIP on schedule
  - ❑ Doing too many tasks sequentially
  - ❑ Not adjusting to revenue/cost conditions
- ❑ Plan of action
  - ❑ Reassessed and established new TIP project schedules (complete)
  - ❑ Delegated projects for Division Delivery (complete)
  - ❑ Revising project development cycles (complete)
  - ❑ Monthly monitoring of program delivery status/cash management (in progress)



# Changes Between the 2018-2027 Draft STIP & Final STIP



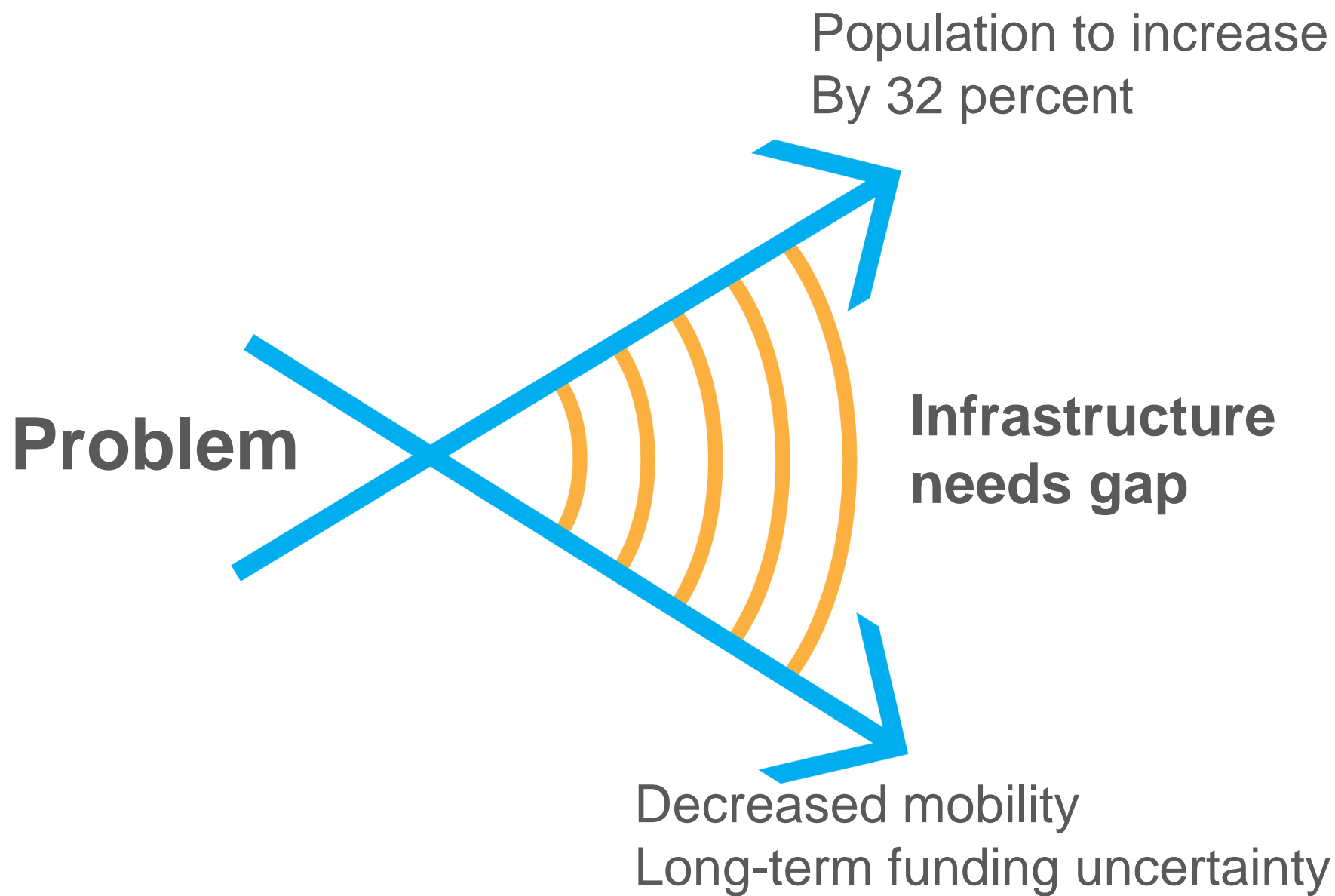
# 22% of Project Requests are Funded



# What are we doing now?

- ☐ Division Mobility Program to address small projects < \$2 M
- ☐ Division Planning Engineers to be technical support and link to rural planning organizations and municipal planning organizations
- ☐ Better access to tools for MPOs/RPOs to help in project selection and strengthen project competitiveness
  - ☐ GIS
  - ☐ Travel Demand Modeling
  - ☐ Freight Analysis Modeling and Network Performance
  - ☐ Performance Metrics for Safety, Mobility, Condition
  - ☐ Transportation Economic Development Impact System
- ☐ Criteria and weights for projects selection of Division Catagory





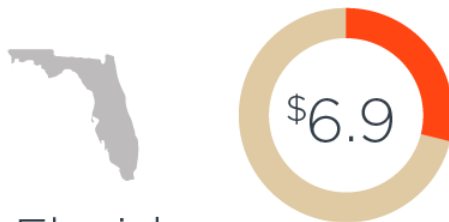
# Revenue (\$B) Among Peer States



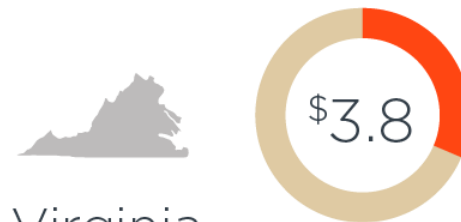
Texas



**North Carolina**



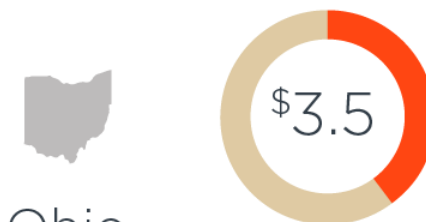
Florida



Virginia

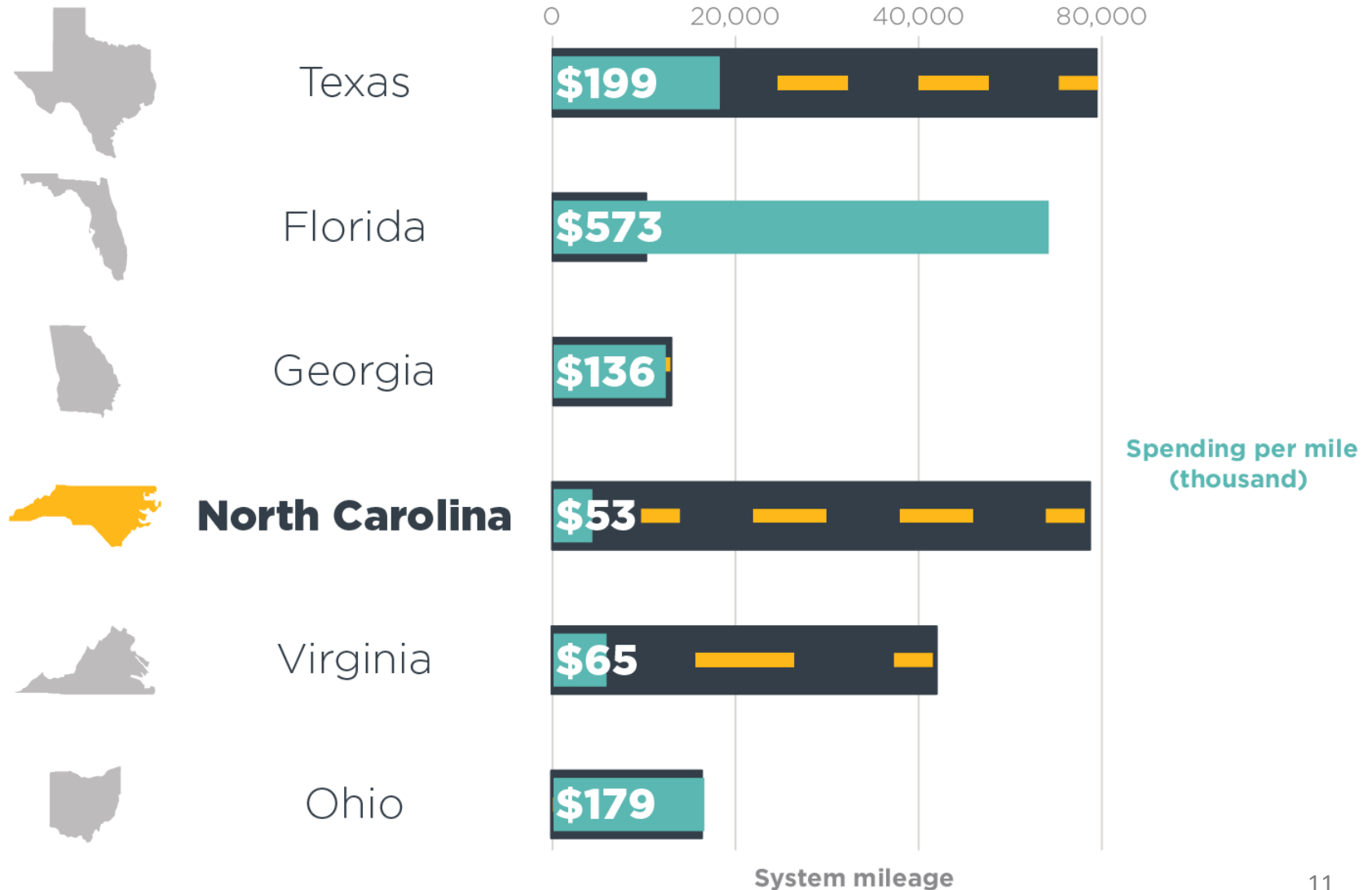


Georgia

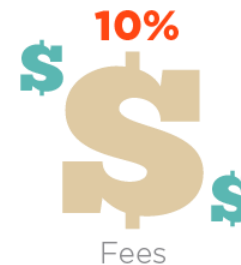
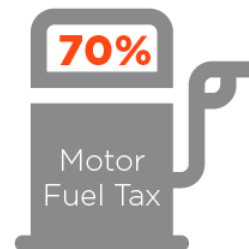
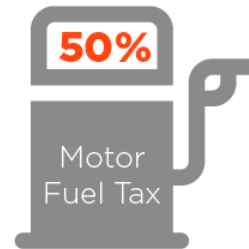


Ohio

# System Mileage vs. Spending Per Mile

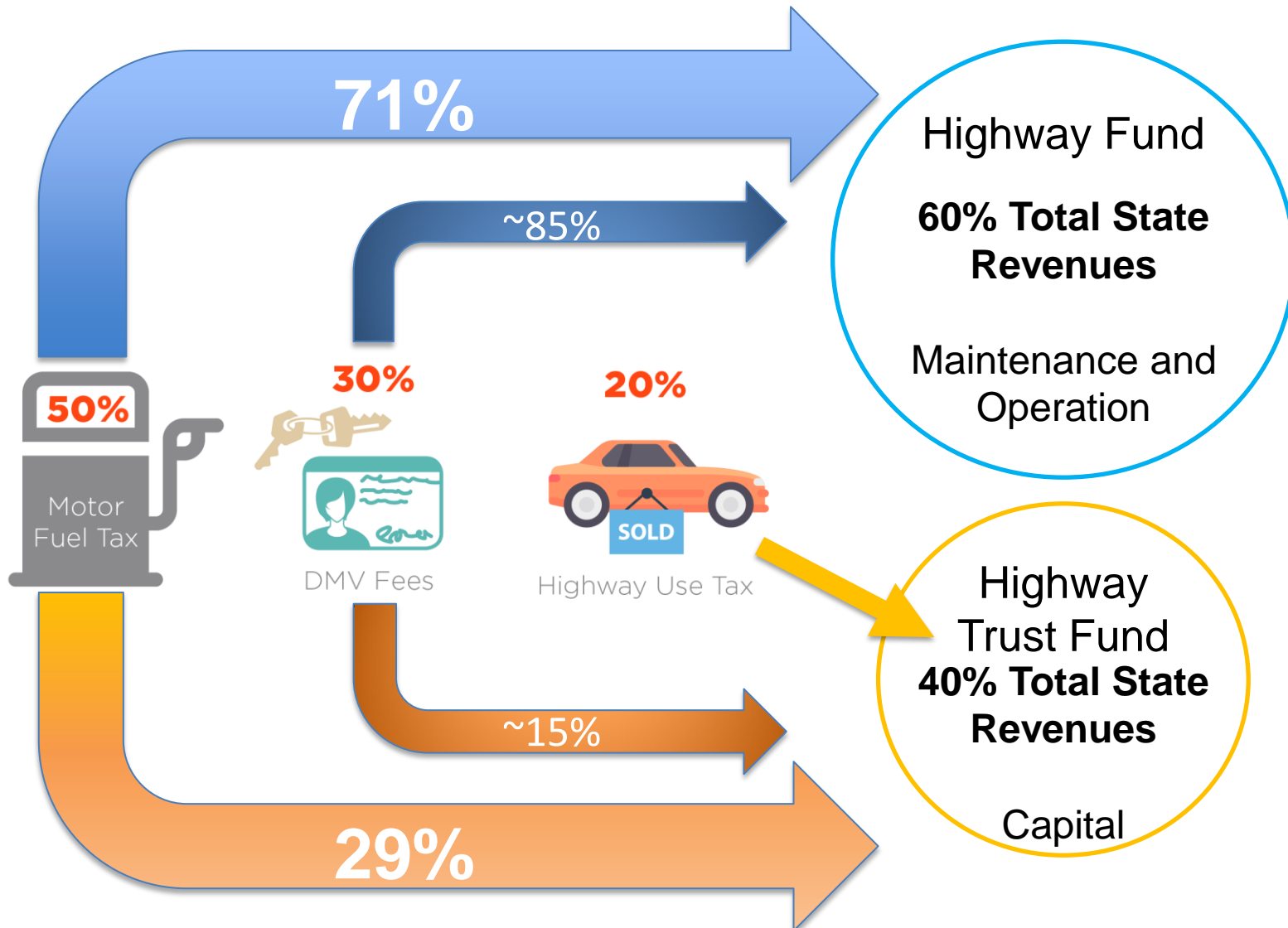


# Overly Dependent on Motor Fuels Revenue for Primary Funding



# Sources

# Funds



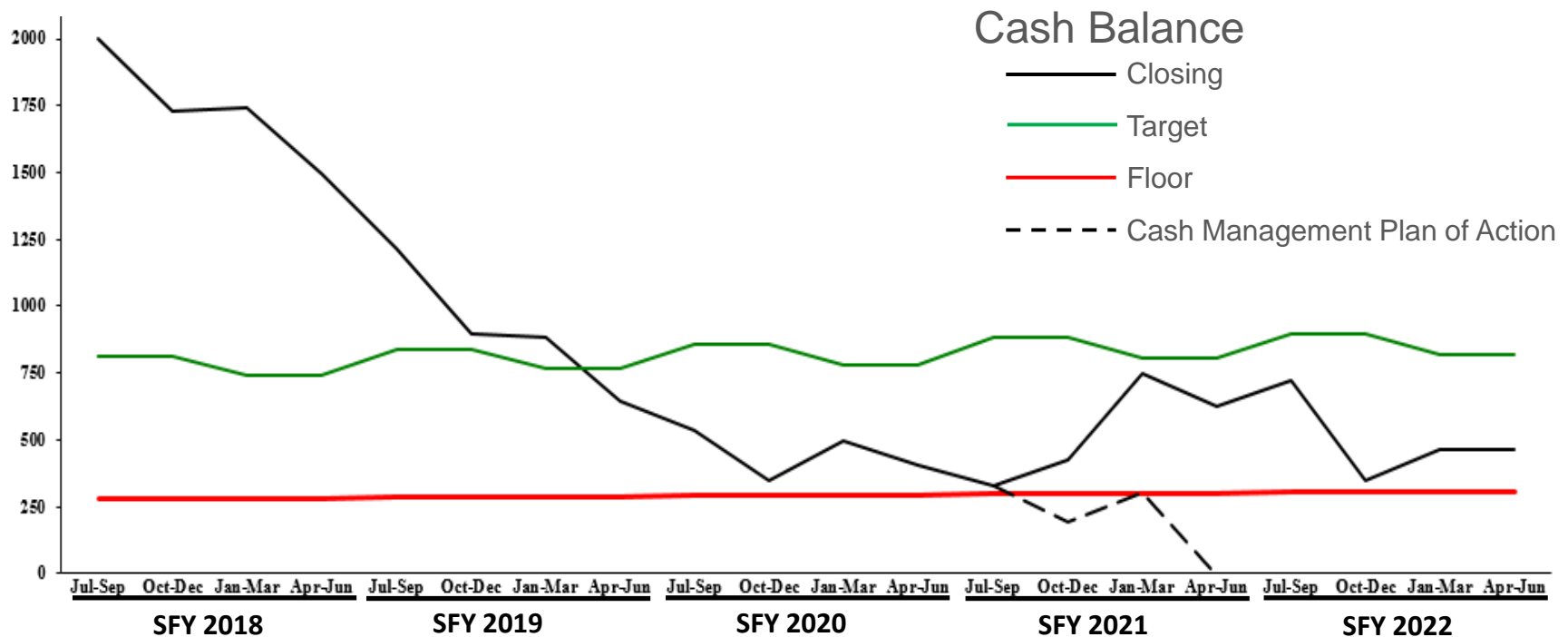


# Solution

- ❑ Begin collecting and considering all viable funding options for future transportation program needs
- ❑ Partner with research experts to evaluate the impact new technology has on current, interim and future funding strategies
- ❑ Act now. NC needs a new, sustainable funding plan identified and ready for implementation within 4 years

# Additional Tools – Why?

Need to leverage debt affordability to accelerate projects beyond 2 years and find long term-funding solutions simultaneously



# Additional Tool – How?

## Innovative Financing – State Bonds

- Between \$2B and \$3B for additional projects
- Amount determined by debt affordability studies
- Applied at the Regional & Division tiers of the Strategic Transportation Investments Law
- Cash balance must be at or below \$750 million to trigger future bond sales

# Economic Impact of Innovative Financing



Investment



Projects\*



Jobs

**\$2 Billion**

**70**

**18,140**

**\$3 Billion**

**106**

**37,230**

**51%**

increase in  
number of  
projects with  
\$3 billion  
investment

**105%**

increase in  
number of  
jobs with  
\$3 billion  
investment

\*In addition to 513 in the STIP for highways

# Transportation is Critical to Support a Growing Economy

## *Site Selection Factors*

<b>1</b>	<b>Highway accessibility</b>	<b>94.4</b>
<b>2</b>	Availability of skilled labor	89.8
<b>3</b>	Labor costs	89.6
<b>4</b>	Occupancy or construction costs	86.0
<b>5</b>	State and local incentives	84.0
<b>6</b>	Corporate tax rate	82.3
<b>7</b>	Tax exemptions	79.7
<b>8</b>	Energy availability and costs	78.5
<b>9</b>	Proximity to major markets	78.1
<b>10</b>	Quality of life	76.4

Combined Ratings: Corporate Survey 2016 (Area Development Magazine)



# Autonomous Vehicles

## ☐ Connected / Autonomous vehicles will change our relationship to vehicles

- ☐ Could result in fewer automobile owners
- ☐ Will increase safety
- ☐ Will change the products we utilize to construct roadways
- ☐ Impact to fees generated by vehicle owners is not yet known



## ☐ Technology will better connect various modes

- ☐ Systems will be created that link through handheld devices
- ☐ Transportation will be more about the outcome – reaching a destination – and less about the tools utilized (car, bus, train)
- ☐ Transportation will become a “service” instead of a mode or result of a product

# Summary

- NC is growing and changing
- NC transportation needs far exceed resources and not competitive with growing peer states
- Multiple funding tools are necessary to meet immediate needs as we seek long-term solutions
- This proposal allows NC to invest more in transportation using current debt capacity as identified by State Treasurer while we find long-term phased in replacements for Motor Fuels and Federal Revenues

# QUESTIONS?